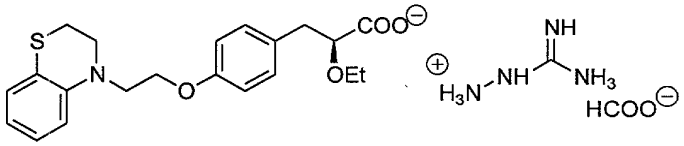
Example 6

Amino guanidine hydrogen carbonate salt of (-)-3-[4-[2-(3,4-dihydro-2H-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxy propanoic acid



[0069] (-)-3-[4-[2-(3,4-Dihydro-2H-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxy propanoic acid (5.8 g) and methanol (60 ml) were added to 250 ml four necked round bottom flask, fitted with a mechanical stirrer and reflux condenser. The reaction mixture was slowly heated to 45-55°C for complete dissolution of the glassy sticky mass. Amino guanidine hydrogen carbonate (2.0 g) dissolved in methanol (20 ml) was added to the reaction mixture at 45-55°C in about 10 min. under stirring. The reaction mixture was maintained for reflux at 60-70°C for 20-24 hours and monitored the progress of the reaction. The methanol was distilled off under reduced pressure at 40-50°C and diisopropyl ether (50 ml) was added, filtered under nitrogen atmosphere. The red colored fluffy mass was further dried at 50-60°C under high vacuum to afford very hygroscopic aminoguanidine salt of (-)-3-[4-[2-(3,4-dihydro-2H-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxy propanoic acid as red solid, (weighs about 6.0 g, yield : 80%, purity 97 - 99% by HPLC).

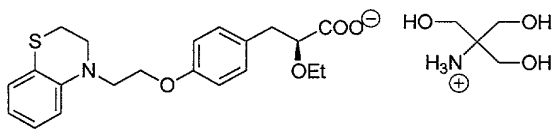
[0070] IR (KBr) cm^{-1} : 3400-3300 (N-H stretch), 2920 (-C-H aliphatic stretch), 1680 ($-COO^-$ stretch), 1585 ($-COO^-$ stretch), 1395 ($-COO^-$ stretch).

[0071] ^1H NMR (200 MHz, DMSO-d_6)δ : 1.0 (t, 3H, CH_3-CH_2-O), 2.6-3.4 (m, 5H, -S- CH_2-, Ar-CH_2, -CH-Ar), 3.45-4.0 (m, 7H, -CH_2-N-CH_2-, -CH-OEt, CH_2-CH_2-O-), 4.05 (q, 2H, -O-CH_2-), 6.5 (t, 1H, -CH_2-CH-), 6.7-7.4 (m, 8H, aromatic).

[0072] Mass m/z : 388 ($M^+ + 1$), 136 ($C_2H_8N_4O_2$).

Example 7

Tris(hydroxymethyl)aminomethane salt of (-)-3-[4-[2-(3,4-dihydro-2H-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxy propanoic acid



[0073] (-)-3-[4-[2-(3,4-Dihydro-2H-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxy propanoic acid (5.8 g) and methanol (60 ml) were added to 250 ml of four necked round bottom flask, fitted with a mechanical stirrer and reflux condenser. The reaction mixture was slowly heated to 45-55°C for complete dissolution of the glassy sticky mass. Tris(hydroxymethyl)aminomethane (1.81 g) dissolved in methanol (10 ml) was added at 45-55°C in about 10 min. under stirring. The reaction mixture was maintained for reflux at 60-80°C for 20-24 h and monitored the progress of the reaction. The methanol was distilled off under reduced pressure at 40-50°C diisopropyl ether (50 ml) was added and stirred for 10 min. The ether layer was decanted. The ether washing was repeated twice to afford the title compound as dark brown highly sticky mass (weighs about 7.0 g, yield : 90%, purity: 95 – 99% by HPLC).

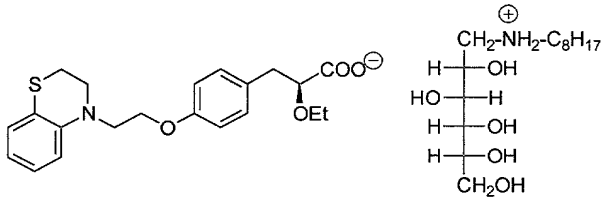
[0074] IR (KBr) cm^{-1} : 3500-3300 (-N-H, O-H stretch), 2920 (-C-H stretch), 1585 ($-COO^-$ stretch), 1409 (-COO- stretch).

[0075] ^1H NMR spectrum in DMSO-d_6 + TFA (TMS as internal standard) is in conformity with the assigned structure.

[0076] Mass m/z : 388 ($M^+ + 1$), 121 ($C_4H_{11}NO_3$).

Example-8

N-Octyl glucamine salt of (-)-3-[4-[2-(3,4-dihydro-2H-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxy propanoic acid



[0077] (-)-3-[4-[2-(3,4-Dihydro-2H-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxy propanoic acid (5.8 g) and methanol (60 ml) were added to 250 ml of four necked round bottom flask, fitted with a mechanical stirrer and reflux condenser. The reaction mixture was slowly heated to 45-55°C for complete dissolution of the glassy sticky mass. N-Octyl glucamine (4.4 g) dissolved in methanol (25 ml) was added at 45-55°C in about 10 min. under stirring. The reaction mixture was maintained for reflux at 60-70°C for 20-24 h and monitored the progress of the reaction. The methanol was distilled off under

reduced pressure at 40-50°C and diisopropyl ether (50 ml) was added and stirred for 10 min. The ether layer was decanted and repeated the ether washing twice to afford the title compound as dark brown sticky mass, (weights about 8.0 g, yield 88%, purity: 96.5 – 99% by HPLC).

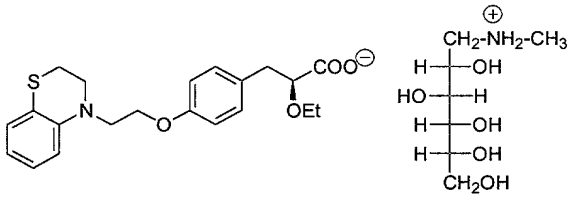
[0078] IR (KBr) cm^{-1} : 3350-3300 (-N-H stretch), 2920 (-C-H stretch), 1586 ($-COO^-$ stretch), 1406 ($-COO^-$ stretch).

[0079] ^1H NMR spectrum is DMSO-d_6 + TFA (TMS as internal standard) is in confirmation with the assigned structure.

[0080] Mass m/z : 388 ($M^+ + 1$), 293 ($C_{14}H_{31}NO_5$).

Example-9

N-methylglucamine salt of (-)-3-[4-[2-(3,4-dihydro-2H-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxy propanoic acid



[0081] (-)-3-[4-[2-(3,4-Dihydro-2H-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxy propanoic acid (5.8 g) and methanol (60 ml) were added to 250 ml of four necked round bottom flask, fitted with a mechanical stirrer and reflux condenser. The reaction mixture was slowly heated to 45-55°C for complete dissolution of the glassy sticky mass. N-methyl glucamine (2.92g) dissolved in methanol (15ml) was added at 45-55°C in about 10 min. under stirring. The reaction mixture was maintained for reflux at 60-70°C for 20-24 h and monitored the progress of the reaction by TLC. The methanol was distilled off under reduced pressure at 40-50°C and diisopropyl ether (50 ml) was added and stirred for 10 min. The ether layer was decanted and repeat the ether washing twice to afford the title compound as dark brown sticky mass, (weighs about 6.5 g, yield : 75%, purity 97.3 - 99% by HPLC). The purity of the salt depends on the purity of the acid used.

[0082] IR (KBr) cm^{-1} : 3350-3300 (-NH, -OH stretching), 2920 (C-H stretch), 1586 ($-COO^-$ stretch).

[0083] ^1H NMR spectrum in DMSO-d_6 + TFA (TMS as internal standard) is in